

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Frank O'Bannon Governor

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Champion Enterprises, Redman Homes Plant 302 Redman Drive Topeka, Indiana 46571

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F087-11756-00044

Original signed by Paul Dubenetzky

Issued by:

Paul Dubenetzky, Branch Chief

Office of Air Quality

Issuance Date: August 8, 2002

Expiration Date: August 8, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary mobile homes manufacturing source.

Authorized Individual: Robert Geil, Safety Director

Source Address: 302 Redman Drive, Topeka, Indiana 46571 Mailing Address: 68956 US 131, White Pigeon, Michigan 49099

SIC Code: 2451 Source Location Status: LaGrange

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

The source is comprised of five (5) production buildings or "plants", described as follows:

(a) Plant 1:

Plant 1, constructed in 1962, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

(b) Frame Shop:

Frame Shop, constructed in 1962, consisting of:

(1) Plant 1 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saw, and router, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

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(2) Undercoating application room, spraying a maximum of 45 pounds of undercoating per hour to metal trailer frames, using an air atomization application system, with dry filters for particulate matter overspray control, exhausting at one (1) stack.

(c) Plant 2:

Plant 2, constructed in 1972, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at eighteen (18) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 2 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, floor sweep, table saw, chop saw, and dry wall splitter, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(d) Plant 3:

Plant 3, constructed in 1973, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at twenty-one (21) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 3 mill shop, processing 11,637 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saws, wood ripper, and jointer, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

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(e) Plant 4:

Plant 4, constructed in 1989, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 4 mill shop, processing 10,707 pounds per hour of wood, consisting woodworking equipment including radial arm saws and table saws, with particulate matter controlled by a vacuum collection system fabric filter dust collector, exhausting outside the building.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, itemized as follows:
 - (1) Plant 1 direct fired heaters, including twenty-five (25) heaters (Heaters 1 through 25) individually rated at 0.08 million British thermal units per hour (MMBtu/hr), without dedicated exhaust stacks; sixteen (16) heaters (Heaters 26 through 41) individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; one (1) heater (Heater 42) rated 0.056 MMBtu/hr, exhausting through one (1) stack; two (2) heaters (Heaters 43 and 44) individually rated at 0.075 MMBtu/hr, all exhausting through one (1) stack; one (1) heater (Heater 45) rated at 0.095 MMBtu/hr, exhausting through one (1) stack; one (1) heater (Heater 46) rated at 0.10 MMBtu/hr, exhausting through one (1) stack; and one (1) heater (Heater 47) rated at 0.190 MMBtu/hr, exhausting through one (1) stack.
 - (2) Frame Shop direct fired heaters, including one (1) heater (Heater 48) rated at 2.94 MMBtu/hr, and one (1) heater (Heater 49) rated at 0.190 MMBtu/hr, both operating and exhausting outside the Frame Shop; and two (2) heaters (Heaters 50 and 51), individually rated at 0.20 MMBtu/hr, all exhausting through one (1) stack.
 - (3) Plant 2 direct fired heaters, including one (1) heater (Heater 52) rated at 0.20 MMBtu/hr, exhausting through one (1) stack; one (1) heater (Heater 53) rated at 0.14MMBtu/hr, exhausting through one (1) stack; fifteen (15) heaters (Heaters 54 through 68), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; and twenty-nine (29) heaters (Heater 69 through Heater 97), individually rated at 0.08 MMBtu/hr, without dedicated exhaust stacks.

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- (4) Plant 3 direct fired heaters, including two (2) heaters (Heaters 98 and 99), individually rated at 0.18 MMBtu/hr, operating and exhausting outside Plant 3; eleven (11) heaters (Heaters 100 through 110), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; and twenty (20) heaters (Heaters 111 through 130), individually rated at 0.08 MMBtu/hr, without dedicated exhaust stacks.
- (5) Plant 4 direct fired heaters, including one (1) heater (Heater 131) rated at 2.5 MMBtu/hr, exhausting through one (1) stack; two (2) heaters (Heaters 132 and 133), individually rated at 0.165 MMBtu/hr, all exhausting through one (1) stack; and nine (9) heaters (Heaters 134 through 142), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour, including plant lift trucks.
- (c) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) The following VOC and HAP storage containers:
 - Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) The following equipment related to manufacturing activities resulting in the negligible emission of HAPs: brazing equipment, cutting torches, soldering equipment and welding equipment, including the total use of less than 100 pounds of welding consumables at Plants 1, 2, 3 and 4.
- (f) Closed loop heating and cooling systems.
- (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (h) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (i) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Heat exchanger cleaning and repair.
- (I) Paved and unpaved roads and parking lots with public access.

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- (m) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (n) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (p) Filter or coalescer media changeout.
- (q) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:

Trimming of less than 100 pounds per hour of wood and other construction materials using hand tools.

- (r) Other activities and categories with negligible potential uncontrolled HAP emissions:
 - 4, 4-methylenediphenyl diisocyanate (MDI) used in polymerization reactions when using polymerizing adhesives (i.e., F2100A ITW Foamseal and Pemco Adhesive). The total MDI emissions from this activity are calculated to be about 9.3 x 10⁻⁵ pounds per hour (0.811 pounds per year, based on 8,760 hours per year of operation).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

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B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

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(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the IDEM Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Telephone No.: 1-800-753-5519 (IDEM Northern Regional Office) Facsimile No.: 574-245-4877 (IDEM Northern Regional Office)

Failure to notify IDEM, OAQ, and the IDEM Northern Regional Office, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency:
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

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- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
 - (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

 If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Manufacturing Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any manufacturing process not exempt by 326 IAC 6-3-1 or already regulated by 326 IAC 6-3-2(b) through (d), and which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

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- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC
 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are
 applicable for any removal or disturbance of RACM greater than three (3) linear feet on
 pipes or three (3) square feet on any other facility components or a total of at least 0.75
 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement that the inspector be accredited is federally enforceable.

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Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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in writing, prior to the end of the initial thirty (30) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

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- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

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- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate response actions. The Permittee shall
 submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
 receipt of the test results. The Permittee shall take appropriate action to minimize
 excess emissions from the affected facility while the response actions are being
 implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

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(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) Plant 1:

Plant 1, constructed in 1962, producing up to two (2) mobile home floors per hour, consisting of

- (1) Product assembly at seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

(b) Frame Shop:

Frame Shop, constructed in 1962, consisting of:

- (1) Plant 1 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saw, and router, with particulate matter controlled by a vacuum collection system with fabric filter dust collector exhausting outside the building.
- (2) Undercoater application room, spraying a maximum of 45 pounds of undercoating per hour to metal trailer frames, using an air atomization application system, with dry filters for particulate matter overspray control, exhausting at one (1) stack.

(c) Plant 2:

Plant 2, constructed in 1972, producing up to two (2) mobile home floors per hour, consisting of

- (1) Product assembly at eighteen (18) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

(d) Plant 3:

Plant 3, constructed in 1973, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at twenty-one (21) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

(e) <u>Plant 4:</u>

Plant 4, constructed in 1989, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) The total VOC input usage to Plant 4, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints, ceiling texture, cleaners and VOC solvents, shall be limited to less than 25 tons per twelve (12) consecutive month period.

(b) Any change or modification which may increase potential VOC usage to twenty-five (25) tons per year at Plant 4 shall require prior approval by OAQ before such change can take place.

Compliance with this requirement shall make the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable to coating facilities at Plant 4. There is also no metal coating done at Plant 4.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

The total combined VOC input usage at Plants 1, 2, 3, 4 and the Frame Shop, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and undercoatings, ceiling texture, cleaners and VOC solvents, shall be limited to less than 99.4 tons per twelve (12) consecutive month period. This usage limit, including the potential to emit for insignificant activities, is required to limit the source-wide potential to emit of VOC to less than 100 tons per year.

Compliance with this limitation shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD), not applicable to the source.

D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]

- (a) The total combined input usage of any single hazardous air pollutant (HAP) at Plants 1, 2, 3, 4 and the Frame Shop shall be limited to less than 10 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (b) The total combined input usage of all hazardous air pollutants (HAPs) at Plants 1, 2, 3, 4 and the Frame Shop shall be limited to less than 24.8 tons per twelve (12) consecutive month period. Compliance with this condition, including the potential to emit of insignificant activities, shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

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D.1.4 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the dry filter for particulate control shall be in operation in accordance with manufacturer's specifications and control emissions from the Frame Shop undercoating application room at all times when the undercoating applicator is in operation.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Frame Shop undercoating application room and control device.

Compliance Determination Requirements

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.7 VOC Emissions and HAP Emissions

Compliance with Conditions D.1.1, D.1.2 and D.1.3 shall be demonstrated within 30 days of the end of each month based on the relevant total volatile organic compound, and single HAP and combined HAP usages for the most recent twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Frame Shop undercoater application room exhaust stack while undercoating is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 through D.1.3, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly, and shall be complete and sufficient to establish compliance with the VOC usage and emission limits established in Conditions D.1.1 and D.1.2, and the HAP usage and emission limits established in Condition D.1.3.
 - (1) The amount, and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) Monthly VOC usage at Plant 4;
 - (3) Total VOC usage at Plants 1, 2, 3, 4 and the Frame Shop combined, for each month;
 - (4) Total individual HAP and total combination of HAPs usage at Plants 1, 2, 3, 4 and the Frame Shop combined, for each month;
 - (5) Weight of VOCs emitted from Plant 4;
 - (6) Weight of total VOCs emitted from Plants 1, 2, 3, 4 and the Frame Shop combined, for each compliance period; and
 - (7) Weight of total individual and total combination of HAPs emitted from Plants 1, 2, 3, 4 and the Frame Shop combined, for each compliance period.
- (b) To document compliance with Conditions D.1.7 and D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2 and D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Woodworking operations as follows:

(a) Frame Shop:

Plant 1 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saw, and router, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(b) Plant 2:

Plant 2 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, floor sweep, table saw, chop saw, and dry wall splitter, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(c) Plant 3:

Plant 3 mill shop, processing 11,637 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saws, wood ripper, and jointer, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(d) Plant 4:

Plant 4 mill shop, processing 10,707 pounds per hour of wood, consisting woodworking equipment including radial arm saws and table saws, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

| Emission Unit/Activity | Process Weight Rate (lbs/hr) | Allowable Emissions (326 IAC 6-3-2) (lb/hr) |
|------------------------|---------------------------------|---|
| Plant 1 mill shop | 10,707 | 12.62 |
| Plant 2 mill shop | 10,707 | 12.62 |
| Plant 3 mill shop | 11,637 | 13.34 |
| Plant 4 mill shop | 10,707 | 12.62 |

D.2.2 PM and PM-10 Emission Limitations [326 IAC 2-8-4][326 IAC 2-2][40CFR 52.21]

PM and PM-10 emitted from the control device of each facility shall be limited as follows:

- (a) the Plant 1 mill shop baghouse shall not exceed 0.564 pounds of PM/PM-10 emitted per ton of wood processed. This is equivalent to 3.02 pounds of PM/PM-10 per hour, based on a maximum throughput of 5.354 tons (i.e., 10,707 pounds) of wood per hour.
- (b) the Plant 2 mill shop baghouse shall not exceed 0.567 pounds of PM/PM-10 emitted per ton of wood processed. This is equivalent to 3.03 pounds of PM/PM-10 per hour, based on a maximum throughput of 5.354 tons (i.e., 10,707 pounds) of wood per hour.
- (c) the Plant 3 mill shop baghouse shall not exceed 0.521 pounds of PM/PM-10 emitted per ton of wood processed. This is equivalent to 3.03 pounds of PM/PM-10 per hour, based on a maximum throughput of 5.819 tons (i.e., 11,637 pounds) of wood per hour.

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(d) the Plant 4 mill shop baghouse shall not exceed 0.567 pounds of PM/PM-10 emitted per ton of wood processed. This is equivalent to 3.03 pounds of PM/PM-10 per hour, based on a maximum throughput of 5.354 tons (i.e., 10,707 pounds) of wood per hour.

Based on 8,760 hours of operation per twelve (12) consecutive month period, compliance with this condition limits the potential to emit of PM and PM-10 from the source to less than 100 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable to this source for emissions of PM-10. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD), not applicable to this source.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the Plant 1, 2, 3 and 4 mill shops and their control devices.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM) and PM-10

In order to comply with D.2.1 and D.2.2, the baghouses for PM and PM-10 control to the Plant 1, 2, 3 and 4 mill shops shall be in operation and control emissions at all times that the mill shops' woodworking equipment is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the respective Plant 1, 2, 3 and 4 mill shops' baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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D.2.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the four (4) mill shops' woodworking operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.2.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the Plant 1, 2, 3 and 4 mill shops' baghouse stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Champion Enterprises, Redman Homes Plant Source Address: 302 Redman Drive, Topeka, Indiana 46571 Mailing Address: 68956 US 131, White Pigeon, Michigan 49099

FESOP No.: 087-11756-00044

| This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. |
|---|
| Please check what document is being certified: |
| 9 Annual Compliance Certification Letter |
| 9 Test Result (specify) |
| 9 Report (specify) |
| 9 Notification (specify) |
| 9 Affidavit (specify) |
| 9 Other (specify) |
| |
| I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. |
| Signature: |
| Printed Name: |
| Title/Position: |
| Date: |

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Champion Enterprises, Redman Homes Plant Source Address: 302 Redman Drive, Topeka, Indiana 46571 Mailing Address: 68956 US 131, White Pigeon, Michigan 49099

FESOP No.: 087-11756-00044

| This f | orm | consists | of 2 | pages |
|--------|-----|----------|------|-------|
|--------|-----|----------|------|-------|

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9 This is an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile

Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

| If any of the following are not applicable, mark N/A |
|--|
| Facility/Equipment/Operation: |
| Control Equipment: |
| Permit Condition or Operation Limitation in Permit: |
| Description of the Emergency: |
| Describe the cause of the Emergency: |

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| f any of the following are not applicable, mark N/A | Page 2 of |
|--|-----------|
| Date/Time Emergency started: | |
| Date/Time Emergency was corrected: | |
| Was the facility being properly operated at the time of the emergency? Y N Describe: | |
| Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other: | |
| Estimated amount of pollutant(s) emitted during emergency: | |
| Describe the steps taken to mitigate the problem: | |
| Describe the corrective actions/response steps taken: | |
| Describe the measures taken to minimize emissions: | |
| If applicable, describe the reasons why continued operation of the facilities are necessar imminent injury to persons, severe damage to equipment, substantial loss of capital inveloss of product or raw materials of substantial economic value: | |
| Form Completed by: Title / Position: Date: Phone: | |

A certification is not required for this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

| Source Name: | Champion Enterprises, Redman Homes Plant |
|------------------|--|
| Source Address: | 302 Redman Drive, Topeka, Indiana 46571 |
| Mailing Address: | 68956 US 131, White Pigeon, Michigan 49099 |
| EEOOD NI | 007 44750 00044 |

FESOP No.: 087-11756-00044

Facilities: Plant 4

Parameter: VOC input usage

Limit: total VOC input usage to Plant 4, including but not limited to the usage of sealants,

bonding materials, adhesives, caulks, wood stains, paints, ceiling texture, cleaners and VOC solvents, shall be limited to less than 25 tons per twelve (12) consecutive

month period

| Month | VOC Usage This Month (tons) | VOC Usage Previous 11 Months (tons) | 12 Month Total VOC Usage (tons) |
|---------|--------------------------------|--|------------------------------------|
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

| 9 | No c | deviation | occurred | in | this | quarter. |
|---|------|-----------|----------|----|------|----------|
|---|------|-----------|----------|----|------|----------|

| 9 | occurred in this quarte as been reported on: | ər. |
|-------|---|---------|
| Title | | |

Attach a signed certification to complete this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

| Source Name: | Champion Enterprises, Redman Homes Plant |
|------------------|--|
| Source Address: | 302 Redman Drive, Topeka, Indiana 46571 |
| Mailing Address: | 68956 US 131, White Pigeon, Michigan 49099 |

FESOP No.: 087-11756-00044

Facility: Plants 1, 2, 3, 4 and the Frame Shop

Parameter: VOC, single and combined HAPs input usage

Limit: (a) total combined VOC input usage at Plants 1.2

- (a) total combined VOC input usage at Plants 1, 2, 3, 4 and the Frame Shop, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and undercoatings, ceiling texture, cleaners and VOC solvents, shall be limited to less than 99.4 tons per twelve (12) consecutive month period
- (b) total combined input usage of any single hazardous air pollutant (HAP) at Plants 1,
 2, 3, 4 and the Frame Shop shall be limited to less than 10 tons per twelve (12) consecutive month period
- (c) total combined input usage of all hazardous air pollutants (HAPs) at Plants 1, 2, 3, 4 and the Frame Shop shall be limited to less than 24.8 tons per twelve (12) consecutive month period

| YEAR: | |
|-------|--|
|-------|--|

| | Total Input Usage This Month (tons) | | Total Input Usage Previous 11 Months (tons) | | | Total 12-Month Input Usage (tons) | | | |
|---------|-------------------------------------|----------------|--|-----|----------------|-----------------------------------|-----|----------------|------------------|
| Month | voc | Single* HAP | Combined HAPs | voc | Single* HAP | Combined HAPs | VOC | Single* HAP | Combined HAPs |
| Month 1 | | | | | | | | | |
| Month 2 | | | | | | | | | |
| Month 3 | | | | | | | | | |

^{*}List the single HAP with the greatest emission rate

| 9 | No deviation | occurred in | this quarter. |
|---|--------------|-------------|---------------|
| | | | |

| | • | er. |
|-------------|---|----------------------------|
| mitted by: | | |
| / Position: | | |
| nature: | | |
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| ne: | | |
| | Deviation hamitted by: A / Position: Details: Details: Deviation hamitted by: Details: Details: Deviation hamitted by: Deviation hamitted by: | e / Position: nature:e: |

Attach a signed certification to complete this report.

Topeka, Indiana

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Champion Enterprises, Redman Homes Plant 302 Redman Drive, Topeka, Indiana 46571 Source Address: 68956 US 131, White Pigeon, Michigan 49099 Mailing Address: FESOP No.: 087-11756-00044 Months: _____ to ____ Year: _____ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken: Permit Requirement** (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken:**

Champion Enterprises, Redman Homes Plant Topeka, Indiana Permit Reviewer: MH / EVP

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|---|------------------------|--|--|--|--|--|--|
| Permit Requirement (specify permit condition #) | | | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | | | |
| Number of Deviations: | | | | | | | |
| Probable Cause of Deviation: | | | | | | | |
| Response Steps Taken: | | | | | | | |
| Permit Requirement (specify permit condition #) | | | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | | | |
| Number of Deviations: | | | | | | | |
| Probable Cause of Deviation: | | | | | | | |
| Response Steps Taken: | | | | | | | |
| Permit Requirement (specify permit condition #) | | | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | | | |
| Number of Deviations: | | | | | | | |
| Probable Cause of Deviation: | | | | | | | |
| Response Steps Taken: | | | | | | | |
| Form Completed By: | | | | | | | |
| Title/Position: | | | | | | | |
| | | | | | | | |
| Date: | | | | | | | |
| Phone: | | | | | | | |

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Champion Enterprises, Redman Homes Plant Source Location: 302 Redman Drive, Topeka, Indiana 46571

County: LaGrange SIC Code: 2451

Operation Permit No.: F087-11756-00044
Permit Reviewer: Michael Hirtler / EVP

On June 17, 2002, the Office of Air Quality (OAQ) had a notice published in the LaGrange Standard, LaGrange, Indiana, stating that Champion Enterprises had applied for a Federally Enforceable State Operating Permit (FESOP) to operate the Redman Homes Plant that manufactures mobile homes. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 3, 2002, OAQ received public comments from Mr. and Mrs. Samuel A. Schrock on the proposed FESOP for this source. The summary of the comments, as excerpts taken from a letter submitted by Mr. and Mrs. Schrock, and related responses is as follows, with any changes made to the permit shown in bold and deleted permit language shown with a line through it:

Comment 1:

We are concerned about the possible health effects on the people of our community, if such permits are issued.

Response to Comment 1:

The primary goal of the Clean Air Act is to protect the health and welfare of people exposed to air pollution, particularly young children, the elderly, and those with asthma. To protect the health and welfare of the public with an added margin of safety, the U.S. EPA has established health-based emission limits and standards, including the National Ambient Air Quality Standards (NAAQS). U.S. EPA has also promulgated technology based emission limits and standards to reduce atmospheric loading of varied air pollutants. Indiana has adopted all such limits and standards, as well as a comprehensive air construction and operating permits program, all of which are codified at Title 326 of the Indiana Administrative Code (IAC). The permitting program helps to ensure that the operation of any new or existing emission source will protect the health and welfare of the public since the air permit will not be issued unless the source can demonstrate that it will comply with each applicable rule cited in the permit.

Enterprises must comply with all:

The proposed permit for Champion Enterprises' Redman Homes Plant is a Federally Enforceable State Operating Permit, or FESOP. Permitting program rules and requirements for FESOPs are contained at 326 IAC Article 2, Rule 8 (i.e., 326 IAC 2-8). As a FESOP source, Champion

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- (a) emission limitations and standards necessary to assure compliance with the permit terms and conditions and all applicable requirements; and
- (b) monitoring, testing, reporting, and record keeping requirements that assure all reasonable information is provided to evaluate continuous compliance with the permit terms and conditions, the underlying requirements of this title, and the CAA.

In meeting the requirements of the FESOP program, Champion Enterprises will reduce their otherwise uncontrolled pollutant emissions by restricting their material usage and utilizing emissions control equipment. Specific limitations and standards, and methods of ensuring continued compliance with such, are contained in Section D of the proposed draft FESOP for this source. Based on the information provided by the source, the source shall be in compliance with all the applicable requirements. IDEM believes that the conditions in the proposed permit are adequate to protect the public health and are not adequate to deny the issuance of the FESOP. Therefore, there is no change to this permit due to this comment.

It is noted that the OAQ will enforce the applicable permit conditions by collecting and reviewing relevant operating data, and by conducting inspections at the source. At any other time, should you have any concerns about the operation of this source regarding compliance with conditions of its permit, please feel free to contact the OAQ inspector for LaGrange County, Doyle Houser, at the IDEM Northern Regional Office at telephone number (800) 753 -5519.

Comment 2:

We would like to know specifically what pollutants or chemicals are emitted from Dutch Housing.

Response to Comment 2:

The pollutants potentially emitted from this source are presented in the Technical Support Document (TSD) to the permit, with supporting detailed emissions calculations contained in Appendix A to the TSD (seven (7) pages). All of the permit related documents mentioned are included with this cover to all interested parties, and in addition is available for public review at the regional and central IDEM office's, respectively located at IDEM Northern Regional Office, 220 West Colfax Avenue, Suite 200, South Bend, Indiana, 46601, and IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015. A copy of the draft permit and supporting documentation, including the TSD and Appendix A, are also available for examination at the IDEM website, www.in.gov/idem/air/permits. Upon its approval, a copy of the final permit will be placed on the IDEM website.

Comment 3:

We would like to receive notices of future proceedings of this issue.

Topeka, Indiana

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Response to Comment 3:

All notices of future modifications, revisions and renewals to this permit will be sent to your address as follows:

Mr. and Mrs. Samuel A. Schrock 2825 W. 200 N LaGrange, Indiana 46761-9451

Upon further review, and in addition to the Comments/Responses presented above, the OAQ has decided to make the following changes to the FESOP renewal. Previously, the terms "particulate" and "particulate matter" were both used in 326 IAC 6-3, but revisions were made to the rule which became effective on June 12, 2002 that included using the term "particulate" which is now used to be consistent with revised 326 IAC 6-3. All permit revisions to reflect revised 326 IAC 6-3 are presented as follows, with changes in bold and strikeout for emphasis:

C.1 Particulate Matter Emission Limitations For Manufacturing Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(ee)]

Pursuant to 326 IAC 6-3-2(e)(e)(2), the allowable particulate matter emissions rate from any manufacturing process not exempt by 326 IAC 6-3-1 or already regulated by 326 IAC 6-1 or any New Source Performance Standard 326 IAC 6-3-2(b) through (d), and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the dry filter for particulate matter (PM) as overspray control from the Frame Shop undercoating application room shall be in operation in accordance with manufacturer's specifications and control emissions from the Frame Shop undercoating application room at all times when the undercoating applicator is in operation. not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P^{0.67} where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.8 Particulate Matter (PM) and PM-10

In order to comply with D.1.4, the dry filters for PM and PM-10 control shall be in operation at all times when the Frame Shop undercoater is in operation.

Permit Reviewer: MH / EVP

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations Particulate Emission Limitations for Manufacturing Processes), particulate matter (PM) emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

| Emission Unit/Activity | Process Weight Rate (lbs/hr) | Allowable PM Emissions (326 IAC 6-3-2) (lb/hr) |
|------------------------|---------------------------------|---|
| Plant 1 mill shop | 10,707 | 12.62 |
| Plant 2 mill shop | 10,707 | 12.62 |
| Plant 3 mill shop | 11,637 | 13.34 |
| Plant 4 mill shop | 10,707 | 12.62 |

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Champion Enterprises, Redman Homes Plant Source Location: 302 Redman Drive, Topeka, Indiana 46571

County: LaGrange SIC Code: 2451

Operation Permit No.: F087-11756-00044
Permit Reviewer: Michael Hirtler / EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from Champion Enterprises relating to first-time operation approval for the existing Redman Homes Plant that manufactures mobile homes.

History

This source was constructed in 1962, and modified in 1972, 1973 and 1989, all under the prior ownership of Redman Homes, Inc. The source was purchased by Champion Enterprises from Redman Homes in October 1997. The source has indicated that the prior owner never obtained construction and operating approval for this source. As such, Champion Enterprises has requested first-time approval for this source as described herein.

Permitted Emission Units and Pollution Control Equipment

This is a first time construction and operation approval and no previous permits, registrations, modifications, or exemptions have been issued to the source. It is noted that this source consists of five (5) individual production buildings. The source has identified these production buildings respectively as the "Frame Shop, "Plant 1", "Plant 2", "Plant 3" and "Plant 4", and these five (5) buildings reflect only one (1) source.

Unpermitted Emission Units and Pollution Control Equipment

The source is comprised of five (5) production buildings or "plants", described as follows:

(a) Plant 1:

Plant 1, constructed in 1962, producing up to two (2) mobile home floors per hour, consisting of

- (1) Product assembly at seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.

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(b) Frame Shop:

Frame Shop, constructed in 1962, consisting of:

- (1) Plant 1 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saw, and router, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.
- (2) Undercoating application room, spraying a maximum of 45 pounds of undercoating per hour to metal trailer frames, using an air atomization application system, with dry filters for particulate matter overspray control, exhausting at one (1) stack.

(c) Plant 2:

Plant 2, constructed in 1972, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at eighteen (18) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 2 mill shop, processing 10,707 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, floor sweep, table saw, chop saw, and dry wall splitter, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

(d) Plant 3:

Plant 3, constructed in 1973, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly at twenty-one (21) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 3 mill shop, processing 11,637 pounds per hour of wood, consisting of woodworking equipment including radial arm saws, table saws, wood ripper, and jointer, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

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(e) <u>Plant 4:</u>

Plant 4, constructed in 1989, producing up to two (2) mobile home floors per hour, consisting of:

- (1) Product assembly consisting of seventeen (17) workstations, using hand (wipe), roll, bead, and brush application of miscellaneous coatings and adhesives applied to wood construction materials, pre-finished wood cabinets, plastic, drywall, shingles, vinyl flooring, and fiberglass parts during mobile home assembly, with emissions exhausting fugitively into the building.
- (2) Wallboard coating area applying with spray gun gypsum-based ceiling texture to wallboard, with emissions exhausting fugitively into the building.
- (3) Plant 4 mill shop, processing 10,707 pounds per hour of wood, consisting woodworking equipment including radial arm saws and table saws, with particulate matter controlled by a vacuum collection system with fabric filter dust collector, exhausting outside the building.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, itemized as follows:
 - (1) Plant 1 direct fired heaters, including twenty-five (25) heaters (Heaters 1 through 25) individually rated at 0.08 million British thermal units per hour (MMBtu/hr), without dedicated exhaust stacks; sixteen (16) heaters (Heaters 26 through 41) individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; one (1) heater (Heater 42) rated 0.056 MMBtu/hr, exhausting through one (1) stack; two (2) heaters (Heaters 43 and 44) individually rated at 0.075 MMBtu/hr, all exhausting through one (1) stack; one (1) heater (Heater 45) rated at 0.095 MMBtu/hr, exhausting through one (1) stack; one (1) heater (Heater 46) rated at 0.10 MMBtu/hr, exhausting through one (1) stack; and one (1) heater (Heater 47) rated at 0.190 MMBtu/hr, exhausting through one (1) stack.
 - (2) Frame Shop direct fired heaters, including one (1) heater (Heater 48) rated at 2.94 MMBtu/hr, and one (1) heater (Heater 49) rated at 0.190 MMBtu/hr, both operating and exhausting outside the Frame Shop; and two (2) heaters (Heaters 50 and 51), individually rated at 0.20 MMBtu/hr, all exhausting through one (1) stack.
 - (3) Plant 2 direct fired heaters, including one (1) heater (Heater 52) rated at 0.20 MMBtu/hr, exhausting through one (1) stack; one (1) heater (Heater 53) rated at 0.14MMBtu/hr, exhausting through one (1) stack; fifteen (15) heaters (Heaters 54 through 68), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; and twenty-nine (29) heaters (Heater 69 through Heater 97), individually rated at 0.08 MMBtu/hr, without dedicated exhaust stacks.

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- (4) Plant 3 direct fired heaters, including two (2) heaters (Heaters 98 and 99), individually rated at 0.18 MMBtu/hr, operating and exhausting outside Plant 3; eleven (11) heaters (Heaters 100 through 110), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack; and twenty (20) heaters (Heaters 111 through 130), individually rated at 0.08 MMBtu/hr, without dedicated exhaust stacks.
- (5) Plant 4 direct fired heaters, including one (1) heater (Heater 131) rated at 2.5 MMBtu/hr, exhausting through one (1) stack; two (2) heaters (Heaters 132 and 133), individually rated at 0.165 MMBtu/hr, all exhausting through one (1) stack; and nine (9) heaters (Heaters 134 through 142), individually rated at 0.15 MMBtu/hr, all exhausting through one (1) stack.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour, including plant lift trucks.
- (c) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) The following VOC and HAP storage containers:
 - Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) The following equipment related to manufacturing activities resulting in the negligible emission of HAPs: brazing equipment, cutting torches, soldering equipment and welding equipment, including the total use of less than 100 pounds of welding consumables at Plants 1, 2, 3 and 4.
- (f) Closed loop heating and cooling systems.
- (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (h) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (i) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Heat exchanger cleaning and repair.
- (I) Paved and unpaved roads and parking lots with public access.

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(m) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

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- (n) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (p) Filter or coalescer media changeout.
- (q) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:
 - Trimming of less than 100 pounds per hour of wood and other construction materials using hand tools.
- (r) Other activities and categories with negligible potential uncontrolled HAP emissions:
 - 4, 4-methylenediphenyl diisocyanate (MDI) used in polymerization reactions when using polymerizing adhesives (i.e., F2100A ITW Foamseal and Pemco Adhesive). The total MDI emissions from this activity are calculated to be about 9.3 x 10⁻⁵ pounds per hour (0.811 pounds per year, based on 8,760 hours per year of operation).

Source Definition

The source owns two (2) plants that are located approximately 15 miles apart, and that are located at the following addresses:

- (a) Redman Homes Plant (this source) is located at 302 Redman Drive, Topeka, Indiana 46571; and
- (b) Dutch Housing Plant is located at 1500 N. Detroit Street, LaGrange, Indiana 46761.

These two (2) plants have the same SIC codes and are owned by one (1) company. However, the properties are not considered to be "adjacent" since there is no nexus between the activities at the two plant locations (i.e., no contribution of parts used in final production nor resource sharing). Based on this, the Redman and Dutch Plants are considered as two (2) separate sources, and the Dutch Housing Plant is permitted under separate FESOP No. 087-11757.

Existing Approvals

The source has no existing approvals.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment and Insignificant Activities.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on January 10, 2000. Additional information was received on May 15, 2000 and December 20, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (seven (7) pages).

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | greater than 250 |
| PM-10 | greater than 250 |
| SO ₂ | less than 100 |
| VOC | greater than 250 |
| СО | less than 100 |
| NO _x | less than 100 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

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Champion Enterprises, Redman Homes Plant Topeka, Indiana

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| HAP's | Potential To Emit (tons/year) |
|---|-------------------------------|
| formaldehyde | less than 10 |
| hexane | less than 10 |
| toluene | less than 10 |
| methyl ethyl ketone (MEK) | less than 10 |
| ethyl benzene | less than 10 |
| xylene | greater than 10 |
| glycol ethers | less than 10 |
| vinyl acetate | less than 10 |
| 4, 4-methylenediphenyl diisocyanate (MDI) | less than 10 |
| TOTAL | less than 25 |

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC is equal to or greater than 100 tons per year for each pollutant. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

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Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant and insignificant emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the control equipment is made practically enforceable in the permit.

| | Potential to Emit (tons/year) | | | | | | | |
|--|-------------------------------|---------------------|-----------------|----------------------|-----|-----------------|--------------------|--|
| Process/facility | PM | PM-10 | SO ₂ | VOC | СО | NO _x | HAPs | |
| Plants 1, 2, 3, 4 & Frame Shop total coating operations, including undercoating room | 16.6 ⁽¹⁾ | 16.6 ⁽¹⁾ | 0.0 | <99.4 ⁽³⁾ | 0.0 | 0.0 | <10 (4) | |
| Plant 1 mill shop (at Frame Shop) | 13.2 (1) | 13.2 (1) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Plant 2 mill shop | 13.3 ⁽¹⁾ | 13.3 (1) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Plant 3 mill shop | 13.3 ⁽¹⁾ | 13.3 ⁽¹⁾ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Plant 4 mill shop | 13.3 ⁽¹⁾ | 13.3 (1) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Plant 1, 2, 3 & 4 total welding (6) | 2.3 (2) | 2.3 (2) | 0.0 | 0.0 | 0.0 | 0.0 | negligible | |
| Natural gas combustion (6) | 0.2 | 0.8 | 0.1 | 0.6 | 0.6 | 4.0 | 0.2 | |
| Total After Issuance | 72.2 | 72.8 | 0.1 | <100 | 0.6 | 4.0 | <25 ⁽⁵⁾ | |

Notes

- 1. Reflects the use of particulate control devices which shall be operated at all times the processes are in operation. Assumes all PM equal to PM10.
- 2. Based on AP-42 emission factors.
- 3. This limit includes an imbedded Plant 4 VOC input usage limit of less than 25 tons VOC per 12 consecutive month period such that the requirements of 326 IAC 8-1-6, BACT, do not apply (see Condition D.1.1).
- 4. As a single hazardous air pollutant (HAP).
- 5. As total HAPs.
- 6. Insignificant activity.

County Attainment Status

The source is located in LaGrange County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | attainment |
| SO ₂ | attainment |
| NO_2 | attainment |
| Ozone | attainment |
| СО | attainment |
| Lead | attainment |

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) LaGrange County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

This new source is not subject to 326 IAC 2-7 (Part 70 Permit Program) requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is limited to less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is limited to less than 10 tons per year, and
- (c) any combination of HAPs is limited to less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) 40 CFR Part 60, Subparts K, Ka, and Kb (Standards of Performance for Petroleum Liquid Storage Vessels and Volatile Liquid Storage Vessels)

The insignificant activity identified as a petroleum fuel, other than gasoline, dispensing facility with storage capacity less than or equal to 10,500 gallons is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.110, 110a - 115a or 110b - 117b, as Subparts K, Ka, and Kb, respectively) since the storage capacity is below the minimum applicable threshold to the three rules (i.e., 40 cubic meters (10,568 gallons)).

There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations)

This source is not subject to the NESHAP for source categories, 326 IAC 20-14, (40 CFR 63, Subpart JJ), *National Emission Standards for Wood Furniture Manufacturing Operations*, for its wood cabinet assembly process since the source is not a major source of hazardous air pollutants pursuant to 40 CFR Part 63.2. The source shall limit coating material usage such that single and combined HAP emissions are limited to less than 10 tpy and 25 tpy, respectively. Therefore this rule does not apply to the source.

Therefore, there are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 61, and 326 IAC 20 and 40 CFR Part 63) applicable to this source.

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State Rule Applicability - Entire Source

326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD)

This existing source was initially constructed prior to the August 7, 1980 rule applicability date, with Plant 1 and the Frame Shop, and Plants 2, 3 and 4 respectively constructed in 1962, 1972, 1973, and 1989. Although the source was modified during 1989 (Plant 4), this source is not considered a major source because it is not one of the 28 listed source categories and, based on an actual operating schedule of 2,080 hours per year, and the continued use of particulate emission controls at the undercoating and four (4) milling facilities, actual source emissions after controls remain below 250 tons per year. Further, as a FESOP source the total input usage of VOC shall be limited to less than 100 tons per year, and the control technology and related compliance requirements for particulates shall limit the potential to emit of PM-10 (and PM) to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD) are not applicable to this source.

326 IAC 2-6 (Emission Reporting)

This source is located in LaGrange County which is not one of the specifically listed counties, nor does the source have the potential to emit CO, VOC, NO_x , PM10 (including fugitive emissions), or SO_2 in amounts at or exceeding one-hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of PM-10 and VOC shall be limited to less than one hundred (100) tons per year, and single and combined HAPs shall be limited to less than 10 and 25 tons per year, respectively. The source shall comply as follows:

- (a) The total combined VOC input usage at Plants 1, 2, 3, 4 and the Frame Shop, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and undercoatings, ceiling texture, cleaners and VOC solvents, shall be limited to less than 99.4 tons per twelve (12) consecutive month period. This usage limit, including the potential to emit for insignificant activities, is required to limit the source-wide potential to emit of VOC to less than 100 tons per year.
- (b) The total combined input usage of any single hazardous air pollutant (HAP) at Plants 1, 2, 3, 4 and the Frame Shop shall be limited to less than 10 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (c) The total combined input usage of all hazardous air pollutants (HAPs) at Plants 1, 2, 3, 4 and the Frame Shop shall be limited to less than 24.8 tons per twelve (12) consecutive month period. Compliance with this condition, including the potential to emit of insignificant activities, shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

(Note: Page 1 of 7, Appendix A, shows the total potential to emit of the combined HAPs at less than 25 tons per year. However, OAQ does not limit each coating and, as such, the potential for coating variability requires the source to comply with the limitation as stated above).

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(d) The total PM-10 emitted from the source shall be controlled at less than 100 tons per year by complying with the applicable control technology operating, monitoring, and record keeping requirements of Section D.2.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with these limitations shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD), not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The source was initially constructed in 1962, and modified in 1972, 1973 and 1989. These dates are prior to the July 27, 1997 rule applicability date and the source shall limit its single and combined HAP emissions to less than 10 tpy and 25 tpy, respectively. Therefore, the source is not subject to the requirements of this rule.

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326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2(c), particulate matter emissions from Plants 1, 2, 3, 4 and the Frame Shop shall be limited as follows:

(a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) as overspray from the Frame Shop undercoating application room shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

The dry filters shall be in operation at all times the undercoating facility is in operation, in order to comply with this limit.

(Note: The process of applying ceiling texture to wallboard is assumed to generate no particulate overspray emissions. The material is a paste-like substance (e.g., wet plaster or spackle) that adheres to the wallboard or deposits near the applicator with no particulate emissions.)

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

| Emission Unit/Activity | Process Weight Rate (lbs/hr) | Uncontrolled PM Emissions (lb/hr) | Control Efficiency % | Controlled PM Emissions (lb/hr) | Allowable PM Emissions (326 IAC 6-3-2) (lb/hr) |
|------------------------|------------------------------------|---|----------------------------|---------------------------------------|---|
| Plant 1 mill shop | 10,707 | 60.48 | >95% * | 3.02 | 12.62 |
| Plant 2 mill shop | 10,707 | 60.69 | >95% * | 3.03 | 12.62 |
| Plant 3 mill shop | 11,637 | 60.69 | >95% * | 3.03 | 13.34 |
| Plant 4 mill shop | 10,707 | 60.69 | >95% * | 3.03 | 12.62 |

^{*}Actual vendor efficiency is \$99.9%, but an efficiency of 95% is conservatively assumed.

The fabric filters shall be in operation at all times the mill shops are in operation, in order to comply with the respective limits.

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(c) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. This includes the following equipment, as insignificant activities:

- (1) The following equipment related to manufacturing activities resulting in the negligible emission of HAPs: brazing equipment, cutting torches, soldering equipment and welding equipment, including the total use of less than 100 pounds of welding consumables at Plants 1, 2, 3 and 4.
- (2) Trimming of less than 100 pounds per hour of wood and other construction materials using hand tools.

There will be no compliance monitoring condition inserted into the permit for these insignificant activities since they do not have a control device and do not have actual emissions exceeding 25 tons per year, nor do they have allowable emissions for the controlled pollutant (i.e., PM) exceeding 10 pounds per hour.

326 IAC 8-1-6 (General Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and are not otherwise regulated by other provisions of Article 8. For this source, coating operations at Plant 1 and the Frame Shop, which includes the undercoating application room, were constructed in 1962, and Plants 2, 3 and 4 were constructed in 1972, 1973 and 1989, respectively. Based on their construction dates, product assembly coating operations at Plants 1, 2, 3 and the Frame Shop are not subject to this rule.

The minimum potential to emit of VOC from product assembly at Plant 4 is estimated at 77 tons per year (i.e., total VOC from Plants 1-4 of 307 tons per year / 4 plants = 77 tons per year per plant, assuming equal production at the four plants). As such, Plant 4 is subject to 326 IAC 8-1-6 since it was constructed after January 1, 1980 and no other Article 8 rules apply to the product assembly coating operation at this plant (see discussions below). The source has therefore opted to limit VOC input usage as follows: the total VOC input usage to Plant 4, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints, ceiling texture, cleaners and VOC solvents, shall be limited to less than 25 tons per twelve (12) consecutive month period. Compliance with this requirement shall make the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable to this facility.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), facilities constructed in a listed county before November 1, 1980, which are located at a source with potential emissions of 100 tons per year or more of VOC, and which meet the criteria of 326 IAC 8-2-9 (a), (b) or (c), shall comply with the applicable requirements of 326 IAC 8-2-9. Facilities constructed in any county after January 1, 1980, and which have potential emissions of 25 tons per year or more of VOC, or facilities existing in listed counties as of July 1, 1990 and having actual emissions of greater than 15 pounds of VOC per day before add-on controls, shall likewise comply with the applicable requirements of 326 IAC 8-2-9.

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Plants 1, 2 and 3, and the Frame Shop, were each constructed prior to November 1, 1980. Since this source is located in LaGrange County, which is a non-listed county, the requirements of 326 IAC 8-2-9 are not applicable to these facilities. Plant 4 was constructed in 1989, after January 1, 1980; however, the source does not perform metal coating operations at Plant 4. Therefore, the requirements of 326 IAC 8-2-9 do not apply to this source.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), facilities constructed in a listed county before November 1, 1980, which are located at a source with potential emissions of 100 tons per year or more of VOC, and which meet the criteria of 326 IAC 8-2-12(a), shall comply with the applicable requirements of 326 IAC 8-2-12. Facilities existing in specifically listed counties as of July 1, 1990, or that are newly constructed in any county after July 1, 1990, with actual emissions of greater than 15 pounds of VOC per day before add-on controls, shall likewise comply with the applicable requirements of 326 IAC 8-2-12.

This source has four (4) saw mills used to cut wood for frame assembly of the mobile homes. The source does not construct wood furniture or cabinets, but does purchase and use prefabricated, *pre-finished*, wood cabinets in the construction of mobile homes. The source has confirmed that no adhesives are used during cabinet assembly. Although the source does use touch-up coatings for product finishing, actual usage is below 15 pounds of VOC per day, and well below the exempted ten (10) gallons of touch-up coatings per day, as cited at 326 IAC 8-2-12(b). Further, Plants 1, 2 and 3, and the Frame Shop, which were each constructed prior to November 1, 1980; and Plant 4, which was constructed in 1989, before July 1, 1990, are not subject to this rule since this FESOP source is located in LaGrange County, which is a non-listed county, and has a limited potential to emit of VOC of less than 100 tons per year. Therefore, the requirements of this rule do not apply to these facilities.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Pursuant to 326 IAC 8-4-1 (Applicability) and 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons) containing VOC whose true vapor pressure is greater than 10.5 kPa (1.52 psi) shall comply with the requirements for external fixed and floating roof tanks and the specified record keeping and reporting requirements. The insignificant activity identified as a petroleum fuel, other than gasoline, dispensing facility with storage capacity less than or equal to 10,500 gallons is not subject to the requirements of 326 IAC 8-4-3 since the storage tank is below the 39,000 gallon threshold for rule applicability.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to sources commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This source is located in LaGrange County; was constructed prior to October 7, 1974; and, as a FESOP source, shall limit total VOC to less than 100 tons per year. Therefore, this rule does not apply to this source.

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326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)
The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd
Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons
per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any
coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter,
Clark or Floyd County. The source is located in LaGrange County. Therefore, this rule is not
applicable to this source.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirement of the rule if located in Clark, Floyd, Lake or Porter Counties. Stationary vessels with capacities less than 39,000 gallons are only subject to the reporting and record keeping requirements of the rule. This rule is not applicable to this source since it is located in LaGrange County.

326 IAC 8-11 (Wood Furniture Coatings)

This rule applies to any person performing wood furniture manufacturing operations in Lake, Porter, Clark, or Floyd County, with the wood furniture manufacturing operations having potential emissions of VOC of 25 tons or more per year and occurring at a source classified with a listed Standard Industrial Classification (SIC) code. This rule is not applicable to this source since it is located in LaGrange County.

Testing Requirements

Compliance testing is not required of this source. The coating material usage and related VOC and volatile organic HAP emissions are based on an emission factor of 2,000 pounds of pollutant emitted per ton of pollutant input to the coating operation, and each of the particulate emitting activities (overspray and mill shops) is controlled by dry filter and baghouses, respectively, with emissions below the relevant allowable particulate matter emission rates, and the source shall comply with the relevant control technology operating, monitoring, and record keeping requirements.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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The compliance monitoring requirements applicable to this source are as follows:

1. The Frame Shop undercoating application room has applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Frame Shop undercoater application room exhaust stack while undercoating is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the undercoating facility must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

- 2. The Plants 1, 2, 3 and 4 mill shops have applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emission notations of the respective Plant 1, 2, 3 and 4 mill shops' baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (b) An inspection shall be performed each calender quarter of all bags controlling the four (4) mill shops' woodworking operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

These monitoring conditions are necessary because the baghouses for the mill shops must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 (PSD) and 326 IAC 2-8 (FESOP).

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Conclusion

The operation of this mobile home manufacturing source shall be subject to the conditions of the attached proposed FESOP No. 087-11756-00044.

| | _ | | | - | | | | |
|----------------------|---|------------------------------|-----------------------------|---------------|--------|--|--|--|
| | Company Name: Champion Enterprises, Redman Homes | | | | | | | |
| | | Address City IN Zip: | 302 Redman Drive, Topeka, I | ndiana 46571 | | | | |
| | FESOP No.: 087-11756-00044 Reviewer: Michael Hirtler / EVP | | | | | | | |
| | | | | | | | | |
| | _ | Date: | April 1, 2002 | | | | | |
| | | | | | | | | |
| | | Potential Uncontro | olled Emissions (tons/year) | | | | | |
| | | Significant Emission | s Generating Activities | | | | | |
| Pollutant | Natural Gas | Total Applied | Four (4) Saw Mills | Total Welding | Total | | | |
| | Combustion | Coatings | (Woodworking) | | | | | |
| | | | | | | | | |
| PM | 0.2 | 277.0 | 1061.0 | 2.3 | 1340.6 | | | |
| PM-10 | 0.8 | 277.0 | 1061.0 | 2.3 | 1341.1 | | | |
| SO2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | | | |
| NOx | 9.6 | 0.0 | 0.0 | 0.0 | 9.6 | | | |
| VOC | 0.6 | 702.5 | 0.0 | 0.0 | 703.1 | | | |
| СО | 4.0 | 0.0 | 0.0 | 0.0 | 4.0 | | | |
| Single HAP | 0.2 | 18.5 | 0.0 | negligible | 18.7 | | | |
| Total HAPs | 0.2 | 23.6 | 0.0 | negligible | 23.8 | | | |
| ncontrolled Potentia | Emissions based on rated | capacity assuming operations | s at 8,760 hours per year. | | | | | |
| | | Potential Controlled/Lim | nited Emissions (tons/year) | | | | | |
| | | Significant Emission | s Generating Activities | | | | | |
| Pollutant | Natural Gas | Total Applied | Four (4) Saw Mills | Total Welding | Total | | | |
| | Combustion | Coatings | (Woodworking) | | | | | |
| PM | 0.2 | 16.6 | 53.1 | 2.3 | 72.2 | | | |
| PM-10 | 0.8 | 16.6 | 53.1 | 2.3 | 72.8 | | | |
| SO2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | | | |
| NOx | 9.6 | 0.0 | 0.0 | 0.0 | 9.6 | | | |
| VOC | 0.6 | <99.4 | 0.0 | 0.0 | <100 | | | |
| СО | 4.0 | 0.0 | 0.0 | 0.0 | 4.0 | | | |
| Single HAP | 0.2 | <10 | 0.0 | negligible | <10 | | | |
| | | | | | | | | |

limit conditions).

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571

FESOP No.: 087-11756-00044
Reviewer: Michael Hirtler / EVP
Date: April 1, 2002

Pollutant Emission Factor (lb/MMcf)

| | | | | PM* | PM10* | SO2 | NOx | VOC | co |
|-----------------------------|--------------------|----------------|-------------------|------|-------|------------------|-------------------|------|-------------|
| Combustion Unit | Heat InputCapacity | Quanitity | Potential Thruput | 1.9 | 7.6 | 0.6 | 94.0 | 5.5 | 40.0 |
| | (MMBtu/hr) | | MMCF/yr | | | | 100.0 | | 84.0 |
| | | | | | | | **see below | | **see below |
| | | | | | Polls | utant Emission R | ate (tons per yea | r) | |
| Heaters 1- 25 (Plant 1) | 0.08 | 25 | 17.52 | 0.02 | 0.07 | 0.01 | 0.82 | 0.05 | 0.35 |
| Heaters 26 - 41 (Plant 1) | 0.15 | 16 | 21.02 | 0.02 | 0.08 | 0.01 | 0.99 | 0.06 | 0.42 |
| Heater 42 (Plant 1) | 0.06 | 1 | 0.53 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 |
| Heaters 43 - 44 (Plant 1) | 0.07 | 2 | 1.23 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.02 |
| Heater 45 (Plant 1) | 0.09 | 1 | 0.79 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.02 |
| Heater 46 (Plant 1) | 0.10 | 1 | 0.88 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.02 |
| Heater 47 (Plant 1) | 0.19 | 1 | 1.66 | 0.00 | 0.01 | 0.00 | 0.08 | 0.00 | 0.03 |
| Heater 48 (Frame Shop) | 2.90 | 1 | 25.40 | 0.02 | 0.10 | 0.01 | 1.27 | 0.07 | 0.51 |
| Heater 49 (Frame Shop) | 1.90 | 1 | 16.64 | 0.02 | 0.06 | 0.00 | 0.83 | 0.05 | 0.33 |
| Heater 50-51 (Frame Shop) | 0.20 | 2 | 3.50 | 0.00 | 0.01 | 0.00 | 0.16 | 0.01 | 0.07 |
| Heater 52 (Plant 2) | 0.20 | 1 | 1.75 | 0.00 | 0.01 | 0.00 | 0.08 | 0.00 | 0.04 |
| Heater 53 (Plant 2) | 0.14 | 1 | 1.23 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.02 |
| Heaters 54 - 68 (Plant 2) | 0.15 | 15 | 19.71 | 0.02 | 0.07 | 0.01 | 0.93 | 0.05 | 0.39 |
| Heaters 69 - 97 (Plant 2) | 0.08 | 29 | 20.32 | 0.02 | 0.08 | 0.01 | 0.96 | 0.06 | 0.41 |
| Heaters 98 - 99 (Plant 3) | 0.18 | 2 | 3.15 | 0.00 | 0.01 | 0.00 | 0.15 | 0.01 | 0.06 |
| Heaters 100 - 110 (Plant 3) | 0.15 | 11 | 14.45 | 0.01 | 0.05 | 0.00 | 0.68 | 0.04 | 0.29 |
| Heaters 111 - 130 (Plant 3) | 0.08 | 20 | 14.02 | 0.01 | 0.05 | 0.00 | 0.66 | 0.04 | 0.28 |
| Heater 131 (Plant 4) | 2.50 | 1 | 21.90 | 0.02 | 0.08 | 0.01 | 1.10 | 0.06 | 0.44 |
| Heater 132 - 133 (Plant 4) | 0.16 | 2 | 2.80 | 0.00 | 0.01 | 0.00 | 0.13 | 0.01 | 0.06 |
| Heater 134 - 142 (Plant 4) | 0.15 | 9 | 11.83 | 0.01 | 0.04 | 0.00 | 0.56 | 0.03 | 0.24 |
| | | | | | | | | | |
| | Total Pot | ential to Emit | (tons per year): | 0.19 | 0.76 | 0.06 | 9.61 | 0.55 | 4.01 |
| | | | | | | | | | |

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPL. D 3/98) Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

^{**}Emission Factors for NOx: Uncontrolled = 94 for heat input capacity <0.3 MMBtu/hr; = 100 for heat input capacity =>0.3 MMBtu/hr

^{**}Emission Factors for CO: Uncontrolled = 40 for heat input capacity <=3 MMBtu/hr; = 84 for heat input capacity >3 MMBtu/hr

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 HAPs Emissions

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571

FESOP No.: 087-11756-00044
Reviewer: Michael Hirtler / EVP
Date: April 1, 2002

HAPs - Organics

| Emission Factor in lb/MMcf | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|---|---------|-----------------|--------------|---------|---------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Total Potential Emission Rate (tons/yr) | 2.1E-04 | 1.2E-04 | 7.5E-03 | 1.8E-01 | 3.4E-04 |

HAPs - Metals

| Emission Factor in lb/MMcf | Lead | Cadmium | Chromium | Manganese | Nickel |
|---|---------|---------|----------|-----------|---------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Total Potential Emission Rate (tons/yr) | 5.0E-05 | 1.1E-04 | 1.4E-04 | 3.8E-05 | 2.1E-04 |

Methodology is the same as page 2 of 7 of TSD, Appendix A.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations at Plants 1, 2, 3, 4 and the Frame Shop

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571
FESOP No.: 087-11756-00044

Reviewer: Michael Hirtler / EVP
Date: April 1, 2002

| | | | | | | rotei | itiai oiloonii | olled Emissi | J113. | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------------|---------------------|--|-------------------|----------------------|-------------------|---------------------------------|--------------------------|------------------------|--|--|-------------------------------------|------------------------------------|-----------------------------------|------------------------------------|--------------------------|------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Coating Materials Applied | Type of Product Being Coated | Density (Lb/Gal) | Weight % Volatile (H20& Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential ton/yr | lb VOC /gal solids | Transfer Efficiency | | | | | | | | | | | | | |
| Miscellaneous Materials Coating Operations | Collectively Applied at Plants | 1, 2, 3 and 4: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2100A ITW Foamseal | wood to drywall | 10.25 | 0.00% | 0.00% | 0.00% | 0.00% | n/a | 17.36202 | gal/hour | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Plastic Roof Cement-Grundy | shingles to shingles | 8.33 | 30.01% | 0.00% | 30.01% | 0.00% | n/a | 9.56202 | gal/hour | 2.50 | 2.50 | 23.91 | 573.72 | 104.70 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Fibered Lap Cement | shingles to roof paper | 8.33 | 30.01% | 0.00% | 30.01% | 0.00% | n/a | 3.52260 | gal/hour | 2.50 | 2.50 | 8.81 | 211.36 | 38.57 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| S255 Sheet Floor Adhesive | vinyl floor to wood | 9.82 | 48.98% | 0.00% | 48.98% | 0.00% | n/a | 0.04471 | gal/hour | 4.81 | 4.81 | 0.22 | 5.16 | 0.94 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Sun Adhesive C-557 | wood to drywall | 9.00 | 36.89% | 0.00% | 36.89% | 0.00% | n/a | 6.75000 | gal/hour | 3.32 | 3.32 | 22.41 | 537.84 | 98.16 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Oatey Cleaner | clean plastic pipe | 6.61 | 100.00% | 0.00% | 100.00% | 0.00% | n/a | 0.01106 | gal/hour | 6.61 | 6.61 | 0.07 | 1.75 | 0.32 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Seam Sealer SU 92 | repair vinyl floor | 7.60 | 76.05% | 0.00% | 76.05% | 0.00% | n/a | 0.00817 | gal/hour | 5.78 | 5.78 | 0.05 | 1.13 | 0.21 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Bostik Chem Calk 900 | wood to drywall | 10.16 | 6.20% | 0.00% | 6.20% | 0.00% | n/a | 0.01538 | gal/hour | 0.63 | 0.63 | 0.01 | 0.23 | 0.04 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Sound Sealant - Franklin | drywall to drywall | 14.05 | 0.43% | 0.00% | 0.43% | 0.00% | n/a | 4.92548 | gal/hour | 0.06 | 0.06 | 0.30 | 7.09 | 1.29 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| AHB Siding White Caulk | window flange to wood | 12.07 | 5.30% | 0.00% | 5.30% | 0.00% | n/a | 1.28942 | gal/hour | 0.64 | 0.64 | 0.83 | 19.81 | 3.61 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Dulux Ultra Paint | wall finish | 12.10 | 6.36% | 0.00% | 6.36% | 0.00% | n/a | 12.91683 | gal/hour | 0.77 | 0.77 | 9.95 | 238.70 | 43.56 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Pemco Adhesive | wood to drywall | 9.32 | 0.00% | 0.00% | 0.00% | 0.00% | n/a | 0.96106 | gal/hour | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Scratch-Fix Touch-Up Tube | wall touch up | 8.24 | 75.00% | 0.00% | 75.00% | 0.00% | n/a | 0.00079 | gal/hour | 6.18 | 6.18 | 0.00 | 0.12 | 0.02 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| ITW Co Foamseal | wood to drywall | 8.73 | 27.95% | 0.00% | 27.95% | 0.00% | n/a | 0.00962 | gal/hour | 2.44 | 2.44 | 0.02 | 0.56 | 0.10 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Sun Adhesive - Sealant | wood to drywall | 10.00 | 29.10% | 0.00% | 29.10% | 0.00% | n/a | 1.18894 | gal/hour | 2.91 | 2.91 | 3.46 | 83.04 | 15.15 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| | | | | | | | | | g | | | 70.02 | 1680.52 | 306.69 | 0.00 | | | | | | | | | | | | | | | |
| Miscellaneous Metals Coating Operations: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manus Bond 30-A (Plant 1 only) | seal screws in metal roof | 14.16 | 39.97% | 0.00% | 39.97% | 0.00% | n/a | 0.04567 | gal/hour | 5.66 | 5.66 | 0.26 | 6.20 | 1.13 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| LBH101-Undercoater (Frame Shop Undercoater Room only) | metal frames | 9.30 | 35.00% | 0.00% | 35.00% | 0.00% | n/a | 27.67885 | gal/hour | 3.26 | 3.26 | 90.09 90.35 | 2162.27 2168.48 | 394.61 395.75 | 277.02 277.02 | ERR | 37% | | | | | | | | | | | | | |
| Touch-Up Coating of Wood Cabinets Collecti | vely Applied at Plants 1, 2, 3 a | and 4: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deft 48w5 Wood Stain | wood touch up | 8.56 | 4.56% | 0.00% | 4.56% | 0.00% | n/a | 0.00035 | gal/hour | 0.39 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| Moores Int Wood Stain | wood touch up | 7.60 | 66.45% | 0.00% | 66.45% | 0.00% | n/a | 0.00210 | gal/hour | 5.05 | 5.05 | 0.01 | 0.25 | 0.05 | 0.00 | ERR | 100% | | | | | | | | | | | | | |
| | · · | | | | | | | | | | | 0.01 | 0.26 | 0.05 | 0.00 | | | | | | | | | | | | | | | |
| Total Uncontrolled Potential to Emit: | | | | | | | | | | | | 160.39 | 3849.25 | 702.49 | 277.02 | | | | | | | | | | | | | | | |
| | | | | | | | | | | 12-mos Input | Control | Controlled | Controlled | Controlled | Controlled | | | | | | | | | | | | | | | |
| | | | | | | | | | | Usage Limit | Efficiency | VOC lbs | VOC lbs | VOC tons | PM | | | | | | | | | | | | | | | |
| | | | | | | | | | | voc | PM | per Hour | per Day | per Year | tons/yr | | | | | | | | | | | | | | | |
| otal Controlled/Limited Potential to Emit: | | | | | | | | | | 14.24% | 94.00% | 160.39 | 3849.25 | < 100 | 16.62 | | | | | | | | | | | | | | | |

Methodology:

LBH101 Undercoater uses asphalt/water/surfactant emulsion with PM emissions based on 39% (weight) solids content provided by source, and assuming that 35% (weight) of the material as asphalt is VOC.

The adhesive products F2100A ITW Foamseal and Pemco Adhesive are polymerizing adhesives that contain methylene bis(phenyl isocyanate) (MDI) and polymeric MDI (PMDI). PMDI completely polymerizes into the product and is not emitted. Only trace amounts of MDI flash-off during product reaction. For Foamseal F2100, the material is 50% MDI and 50% PMDI. Computations of the MDI flash-off emissions were provided by the source and determined using

MDI Emissions Reporting Guidelines, published by The Society of the Plastics Industry, as 5e-07 ib MDI per lb-F2100A Foamsel used. Based on a maximum material usage rate of 17.36 gal/hr, this produces a VOC and MDI emission rate of 3.9e-04 tons per year. Detailed calculations were not available for the Permoc material; however, due to its similar behavior to the Foamsead, emissions were estimated using the Foamseal emission factor applied to the Permoc adhesive, adjusted to reflect the Permoc 40% MDI content. The Permoc emission factor was estimated as 4e-07 ib MDI per lb Permoc and, based on a maximum material usage rate of 0.96 gal/hr, the produces a VOC and MDI

The source uses acetone as a cleaning solvent. Pursuant to 326 IAC 1-2-48, acetone is a nonphotochemically reactive hydrocarbon and the organic content is considered as water for compliance calculation purposes. It is therefore not listed herein.

Total coating material input usage at Plants 1, 2, 3, 4 and the Frame Shop, including VOC solvents, shall be limited such that the potential to emit (PTE) VOC from the source shall be limited to less than 100 tons per twelve (12) consecutive months; and the PTE single and combined HAP shall be limited to less than 10 tons and 25 tons per twelve consecutive month period, respectively. Compliance with these limits shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

Plant 4, constructed in 1989, shall limit total coating material input usage, including VOC solvent usage, such that the potential to emit (PTE) VOC shall be limited to less than 25 tons per twelve (12) consecutive months. Compliance with this limit shall make the requirements of 326 IAC 8-1-6. BACT, not applicable.

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/qal) * Gal of Material (qal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency

Total Uncontrolled Potential Emissions = Sum of All Coatings and Solvents Applied

Controlled VOC Emission Rate = Uncontrolled Emission Rate * (1 - VOC Input Limitation)

Controlled PM Emission Rate = Uncontrolled Emission Rate * (1 - Control Efficiency)

Appendix A: Hazardous Air Pollutant (HAP) From Surface Coating Operations at Plants 1, 2, 3, 4 and the Frame Shop

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571

FESOP No.: 087-11756-00044
Reviewer: Michael Hirtler / EVP
Date: April 1, 2002

| Coating Materials Collectively | Density | Gal of Mat | Maximum | Weight % | HAP EMISSION RATES (TONS PER YEAR) | | | | | | | |
|---|--|------------|-------------|----------|----------|----------|----------|----------|----------|------------------------------------|---------|---------|-------------|---------|--------|----------|--|
| Applied at Plants 1, 2, 3 and 4 | (Lb/Gal) | (gal/unit) | (unit/hour) | MEK | Benzene | Ethyl | MIBK | Toluene | Xylene | MEK | Benzene | Ethyl | MIBK | Toluene | Xylene | Total | |
| and the Frame Shop | | | | | | Benzene | | | | | | Benzene | | | | All HAPs | |
| | | | | | | | | | | | | | | | | ı | |
| | | | | | | | | | | | | | | | | | |
| F2100A ITW Foamseal | 10.25 | 17.36202 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Plastic Roof Cement-Grundy | 8.33 | 9.56202 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Fibered Lap Cement | 8.33 | 3.52260 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Manus Bond 30-A | 14.16 | 0.04567 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 40.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 1.13 | 0.00 | 1.13 | |
| S255 Sheet Floor Adhesive | 9.82 | 0.04471 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.08 | |
| Sun Adhesive C-557 | 9.00 | 6.75000 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 5.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.30 | 13.30 | |
| Oatey Cleaner | 6.61 | 0.01106 | gal/hour | 92.50% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | |
| Seam Sealer SU 92 | 7.60 | 0.00817 | gal/hour | 32.50% | 0.00% | 0.00% | 0.00% | 32.50% | 0.00% | 0.09 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.18 | |
| Deft 48w5 Wood Stain | 8.56 | 0.00035 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Bostik Chem Calk 900 | 10.16 | 0.01538 | gal/hour | 0.00% | 0.00% | 0.90% | 0.00% | 0.00% | 4.10% | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.03 | 0.03 | |
| Moores Int Wood Stain | 7.60 | 0.00210 | gal/hour | 0.00% | 1.20% | 0.00% | 0.00% | 0.00% | 1.20% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Sound Sealant - Franklin | 14.05 | 4.92548 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| LBH101-Undercoater | 9.30 | 27.67885 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| AHB Siding White Caulk | 12.07 | 1.28942 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Dulux Ultra Paint | 12.10 | 12.91683 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Pemco Adhesive | 9.32 | 0.96106 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Scratch-Fix Touch-Up Tube | 8.24 | 0.00079 | gal/hour | 18.40% | 0.00% | 0.00% | 12.90% | 0.00% | 0.00% | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | |
| ITW Co Foamseal | 8.73 | 0.00962 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Sun Adhesive - Sealant | 10.00 | 1.18894 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 10.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.21 | 5.21 | |
| | | | | | | • | | • | | • | | • | • | • | • | | |
| Total Uncontrolled Potential to Emit (tons per ye | otal Uncontrolled Potential to Emit (tons per year): | | | | | | 0.39 | 0.00 | 0.01 | 0.00 | 1.30 | 18.54 | (see below) | | | | |
| Tatal Controlled (Limited Batantial to Emit (Long | | | | | | | | | | | | | | | .40 | | |
| Total Controlled/Limited Potential to Emit (tons | per year): | | | | | | | | | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | ļ | |

| | Density | Gal of Mat | Maximum | Weight % | Weight % | Weight % | Weight % | Weight % | Weight % | | ŀ | AP EMISSIO | N RATES (TO | NS PER YEAR) | l | |
|--|------------|------------|-------------|----------|----------|----------|-----------|-----------|----------|--------|---------|------------|-------------|--------------|------|----------|
| Coating Materials Applied | (Lb/Gal) | (gal/unit) | (unit/hour) | Glycol | Vinyl | MDI * | Chromium | Cobalt | _ | Glycol | Vinyl | MDI | Chromium | Cobalt | | Total |
| | | | | Ethers | Acetate | | Compounds | Compounds | | Ethers | Acetate | | Compounds | Compounds | | All HAPs |
| | | | | | | | | · | | | | | | | | 1 |
| F2100A ITW Foamseal | 10.25 | 17.36202 | gal/hour | 0.00% | 0.00% | 5.0E-07 | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 3.90E-04 | 0.00 | 0.00 | | 0.00 |
| Plastic Roof Cement-Grundy | 8.33 | 9.56202 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Fibered Lap Cement | 8.33 | 3.52260 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Manus Bond 30-A | 14.16 | 0.04567 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| S255 Sheet Floor Adhesive | 9.82 | 0.04471 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Sun Adhesive C-557 | 9.00 | 6.75000 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Oatey Cleaner | 6.61 | 0.01106 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Seam Sealer SU 92 | 7.60 | 0.00817 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Deft 48w5 Wood Stain | 8.56 | 0.00035 | gal/hour | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Bostik Chem Calk 900 | 10.16 | 0.01538 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Moores Int Wood Stain | 7.60 | 0.00210 | gal/hour | 0.00% | 0.00% | 1.10% | 1.40% | 0.20% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Sound Sealant - Franklin | 14.05 | 4.92548 | gal/hour | 0.60% | 0.06% | 0.00% | 0.00% | 0.00% | 0.00% | 1.82 | 0.18 | 0.00 | 0.00 | 0.00 | | 2.00 |
| LBH101-Undercoater | 9.30 | 27.67885 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| AHB Siding White Caulk | 12.07 | 1.28942 | gal/hour | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.36 | 0.00 | 0.00 | 0.00 | 0.00 | | 1.36 |
| Dulux Ultra Paint | 12.10 | 12.91683 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Pemco Adhesive | 9.32 | 0.96106 | gal/hour | 0.00% | 0.00% | 4.0E-07 | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 1.57E-05 | 0.00 | 0.00 | | 0.00 |
| Scratch-Fix Touch-Up Tube | 8.24 | 0.00079 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| ITW Co Foamseal | 8.73 | 0.00962 | gal/hour | 0.00% | 0.00% | 10.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | | 0.04 |
| Sun Adhesive - Sealant | 10.00 | 1.18894 | gal/hour | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| Total Uncontrolled Potential to Emit (tons per y | ear): | | | | | | | | | 3.18 | 0.18 | 0.04 | 0.00 | 0.00 | 0.00 | 23.64 |
| Total Controlled/Limited Potential to Emit (tons | per year): | | | | | | | | | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | < 25 |

METHODOLOGY

Methylene bis(phenyl isocyante) (MDI) flash-off emissions for the Foamseal F2100 adhesive material provided by source based on "MDI Emissions Reporting Guidelines", published by The Society of the Plastics Industry. MDI emission factor is 5e-07 lb/lb-F2100A Foamseal used for this product, which is based on a 50% MDI content. The product, Pemco Adhesive, has approximately 40% MDI and behaves the same way as the F200A ITW Foamseal. Detailed calculations were not available for the Pemco material; however, due to its similar behavior to the Foamseal, emissions were estimated using the Foamseal emission factor applied to the Pemco adhesive, adjusted to reflect the Pemco 40% MDI content.

Total coating material input usage at Plants 1, 2, 3, 4 and the Frame Shop, including VOC solvents, shall be limited such that the potential to emit (PTE) single and combined HAP shall be limited to less than 10 tons and 25 tons per twelve consecutive month period, respectively. Compliance with these limits shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

Uncontrolled Potential HAP Emission Rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs Limited Potential HAP Emission Rate (tons/yr) = Uncontrolled Potential HAP Emission Rate * Coaling Material Input Limit (such that single HAP emissions <10 tpy and total HAP emissions < 25 tpy)

Appendix A: Process Emission Calculations

PM/PM10

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571

FESOP No.: 087-11756-00044
Reviewer: Michael Hirtler / EVP
Date: April 1, 2002

| Emission Unit | Inlet Grain | Air to Cloth | Total Filter | Control Device | PM Control | Potential PM/PM10 Emiss | | | | Process | 326 IAC 6-3-2 |
|-----------------------------------|-------------|----------------|--------------|-----------------------|--------------|-------------------------|-----------|---------|-----------|-------------|------------------|
| Description | Loading | Ratio Air Flow | Area | Fan Flow Rate | Efficiency * | Before Controls | | After 0 | Controls | Weight Rate | PM Emission Rate |
| | (gr/acf) | (acfm/ft^2) | (ft^2) | (acfm) | (%) | (lb/hr) | (tons/yr) | (lb/hr) | (tons/yr) | (lb/hr) | (lb/hr) |
| | | | | | | | | | | | |
| Vacuum System & Baghouse Control: | | | | | | | | | | | |
| Plant 1 Mill Shop (at Frame Shop) | 0.63 | 0.045 | 247,680 | 11,200 | 95.0% | 60.48 | 264.90 | 3.02 | 13.25 | 10,707 | 12.62 |
| Plant 2 Mill Shop | 1.20 | 0.110 | 53,664 | 5,900 | 95.0% | 60.69 | 265.80 | 3.03 | 13.29 | 10,707 | 12.62 |
| Plant 3 Mill Shop | 1.20 | 0.110 | 53,664 | 5,900 | 95.0% | 60.69 | 265.80 | 3.03 | 13.29 | 11,637 | 13.34 |
| Plant 4 Mill Shop | 1.20 | 0.110 | 53,664 | 5,900 | 95.0% | 60.69 | 265.80 | 3.03 | 13.29 | 10,707 | 12.62 |
| | • | | • | · | | | | | | | • |
| | | | | Total Potential to En | nit PM/PM10: | 242.54 | 1062.31 | 12.13 | 53.12 | | |

Methodology:

* Actual control efficiency is listed as 99.95 % in the permit application, but a lower efficiency is used herein to provide greater operating flexibility which does not affect compliance with the allowable emission limits for these operations.

Potential Uncontrolled Emissions (tons/yr) = Inlet Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

Potential Controlled Emissions (tons/yr) = Inlet Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * (1 - Control Efficiency)

Total PM is conservatively assumed equal to PM-10.

The allowable PM emission rate pursuant to 326 IAC 6-3-2(c), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

 $E = 4.1 * P^0.67$ where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr)

Appendix A: Welding Page 7 of 7 TSD App A

Company Name: Champion Enterprises, Redman Homes
Address City IN Zip: 302 Redman Drive, Topeka, Indiana 46571

FESOP No.: 087-11756-00044

Reviewer: Michael Hirtler / EVP

Date: April 1, 2002

| PROCESS | Total Max. Electrode Consumption | EN | MISSION FACT | ORS * (lb pollu | tant / lb electro | de) | | TOTAL HAPS | | | | |
|--|--|-----------|--------------|-----------------|-------------------|----------|-----------|------------|----------|----------|----------|------|
| WELDING | (lbs/hr) | PM = PM10 | Manganese | Nickel | Cobalt | Chromium | PM = PM10 | Manganese | Nickel | Cobalt | Chromium | |
| | | | | | | | | | | | | |
| Metal Inert Gas (E70S) - Plants 1,2,3 & 4 | < 100 | 5.20E-03 | 2.00E-04 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 5.20E-01 | 2.00E-02 | 1.00E-04 | 1.00E-04 | 1.00E-04 | 0.02 |
| | | | | | | | | | | | | |
| Uncontrolled Potential to Emit (lbs/hr) | | | | | | | 0.52 | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 |
| Uncontrolled Potential to Emit (lbs/day) | | | | | | | 12.48 | 0.48 | 0.00 | 0.00 | 0.00 | 0.49 |
| Uncontrolled Potential to Emit (tons/year) | | | | | | | 2.28 | 0.09 | 0.00 | 0.00 | 0.00 | 0.09 |
| | | | | | | | | | | | | |

METHODOLGY

Emission Factors from AP 42 (January 1995), Chapter 12.19, Tables 12.19-1 and 12.19-2, with MIG default electrode type E70S.

Welding emissions, lb/hr: (max. lbs of electrode used/hr)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.